

NVI 5235.2
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of William E. Kunkle, et al.
Serial No. 10/623,881
Filed July 21, 2003
For FEED RATIONS AND METHODS OF FEEDING GROWING RUMINANTS

October 24, 2003

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INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicants submit copies of the references listed
* on the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the above-entitled application and to be made of record therein.

Respectfully submitted,

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				First Named Inventor	William E. Kunkle
				Group Art Unit	
				Examiner Name	
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U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		
		Number	Kind Code ² (if known)				
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
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OTHER ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.					T ⁶
	1	Krehbiel, et al., USE OF UREA, RUMINALLY PROTECTED METHIONINE, AND FAT ALONE OR IN COMBINATION IN LIQUID SUPPLEMENTS TO ENHANCE NUTRIENT STATUS AND MILK PRODUCTION IN BEEF COWS GRAZING NATIVE RANGE, Novus International, Inc. and Farmland Industries, Inc. unpublished report, August 27, 2001, pgs. 1-24					
	2	Pulsipher et al., EFFECTS OF METHIONINE HYDROXY ANALOG AND (OR) FAT ADDED TO A MOLASSES-UREA-BASED SUPPLEMENT ON RUMINAL AND POSTRUMINAL DIGESTION AND DUODENAL FLOW OF NUTRIENTS IN BEEF STEERS CONSUMING LOW-QUALITY LOVEGRASS HAY, Oral Presentation June 21, 2001 - Western Section American Society of Animal Science, 73rd Annual Meeting, Montana State University, Bozeman, Montana, June 20-22, 2001, pgs. 25-46					

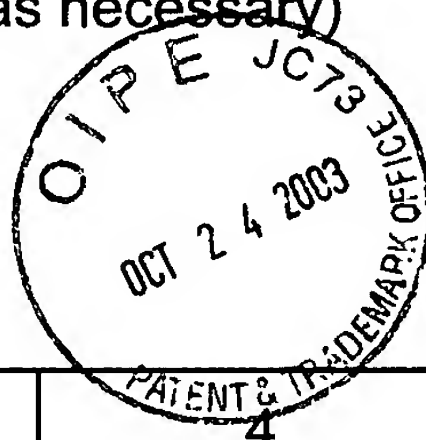
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	3	Loest, et al., SOYBEAN HULLS AS A PRIMARY INGREDIENT IN FORAGE-FREE DIETS FOR LIMIT-FED GROWING CATTLE, Journal of Animal Science 2001 (79) pgs. 766-774	
	4	Krehbiel, et al., THE EFFECTS OF SUPPLEMENTS CONTAINING METHIONINE HYDROXY ANALOG AND FAT SEPARATELY OR IN COMBINATION FED TO COWS ON NATIVE RANGE ON COW BODY WEIGHTS, BODY CONDITION SCORES, MILK PRODUCTION, AND CALF BODY WEIGHTS, University of New Mexico, unpublished preliminary results report, 1998	
	5	Kunkle, et al., IS METHIONINE THE FIRST LIMITING AMINO ACID FOR GROWING CATTLE FED FORAGES?, Proceeding of 10th Annual Florida Nutrition Symposium, University of Florida, Gainesville, 1999, pgs. 28-38	
	6	Kunkle, et al., RECENT RESEARCH ON LIQUID SUPPLEMENTS FOR BEEF CATTLE, Florida Ruminant Nutrition Symposium Proceedings; University of Florida, Gainesville, January 16-17, 1997	
	7	Curtin, MOLASSES - GENERAL CONSIDERATIONS, National Feed Ingredients Association, 1983, pgs. 1-11	
	8	Pulsipher, et al., THE EFFECTS OF MOLASSES-UREA WITH OR WITHOUT FAT AND(OR) METHIONINE HYDROXY ANALOG (MHA) ON NUTRITIONAL STATUS, REPRODUCTIVE PERFORMANCE AND CALF GROWTH IN COWS GRAZING NATIVE RANGE, Journal of Animal Science, Vol. 77, Supplement 1, 1999, Ref. #47, pg.106	
	9	Pulsipher, et al, EFFECTS OF METHIONINE HYDROXY ANALOG (MHA) AND(OR) FAT ADDED TO A LIQUID SUPPLEMENT ON RUMINAL AND POSTRUMINAL DIGESTION AND DUODENAL FLOW OF NUTRIENTS IN BEEF STEERS CONSUMING LOW-QUALITY LOVEGRASS HAY, Journal of Animal Science, Vol. 79, Supplement 2, 2001, Ref. #106, pgs. 136-137	
	10	Rodriguez, et al., EFFECTS OF ALIMET ON PERFORMANCE OF GROWING CATTLE FED FORAGE DIETS AND MOLASSES BASED LIQUID SUPPLEMENTS, Journal of Animal Science, Vol. 80, Supplement 1 / Journal of Dairy Science, Vol. 85, Supplement 1, 2002, Ref. #953, pgs. 238-239	
	11	Bergen, et al. ENZYMATIC DETERMINATION OF THE PROTEIN QUALITY OF INDIVIDUAL RUMEN BACTERIA, Journal of Nutrition, Vol. 92, 1967, pgs. 357-364	
	12	Lusby, RUMEN-STABLE METHIONINE IMPROVES GAIN OF LIGHTWEIGHT CATTLE, Feedstuffs, December 20, 1993	

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	13	Schwab, et al, AMINO ACID LIMITATION AND FLOW TO DUODENUM AT FOUR STAGES OF LACTATION. 1. SEQUENCE OF LYSINE AND METHIONINE LIMITATION, Journal of Dairy Science, Vol. 75, No. 12, 1992, pgs. 3486-3502	
	14	Brown, CANE MOLASSES AND COTTONSEED MEAL SUPPLEMENTATION OF AMMONIATED TROPICAL GRASS HAY FOR YEARLING CATTLE, Journal of Animal Sciences, Vol. 71, 1993, pgs. 3451-3457	
	15	Pate, et al., VALUE OF FEATHER MEAL IN A MOLASSES-BASED LIQUID SUPPLEMENT FED TO YEARLING CATTLE CONSUMING A FORAGE DIET, Journal of Animal Sciences, Vol. 73, 1995, pgs. 2865-2872	
	16	Stateler, et al., EFFECT OF PROTEIN LEVEL AND SOURCE IN MOLASSES SLURRIES ON THE PERFORMANCE OF GROWING CATTLE FED HAY DURING WINTER, Journal of Animal Sciences, Vol. 73, 1995, pgs. 3078-3084	
	17	Popovici, et al., METABOLISM SYNTHETIC METHIONINE RUMINANT (CALVES), Nutrition Abstracts Review, 53(10), 640, 1983	
	18	Popovici, et al., INFLUENTA ANALOGULUI METIONINEI ASUPRA PROCESULUI DE CRESTERE LA TINERETUL TAURIN IN PERIOADA 0-6 LUNI (English translation of Materials and Methods section provided)	
	19	Strzetelski, et al., EFFECTS OF SYNTHETIC DL METHIONINE, METHIONINE HYDROXY ANALOG AND PROTECTED METHIONINE SUPPLEMENTATION OF THE DIET ON INTENSIVE FATTENING OF YOUNG BULLS, Rocznik: Nauk Rolniczych 1983 Seria B Tom 101 Zeszyt 3, pgs. 27-39	
	20	Varner, METHIONINE HYDROXY ANALOG SUPPLEMENTATION OF BEEF COWS, Summary Report on 1973 Collaboration Study, 1973, pgs. 1-8	
	21	Gardner, et al., PROTEIN AND METHIONINE SOURCES IN CALF STARTERS, Journal of Dairy Science, Abstract P112, Vol. 55, No. 5, pg. 704	
	22	Lane, et al., A RESPONSE OF YOUNG DAIRY CALVES TO METHIONINE HYDROXY ANALOG, Journal of Dairy Science, Vol. 56, No. 2, pg. 313	
	23	Burroughs, et al., INITIAL EXPERIMENT WITH METHIONINE-HYDROXY-ANALOGUE-CALCIUM ADDED TO AN ALL-UREA SUPPLEMENT FOR FINISHING HEIFER CALVES, A.S. Leaflet R122, Iowa State University, July 1969, pgs. 1-7	

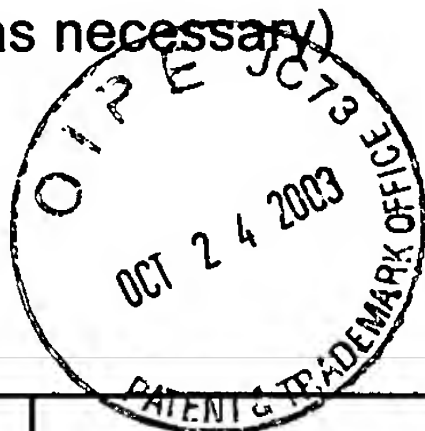
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	24	FLORIDA BEEF CATTLE NEED ADDED METHIONINE, The Florida Beef Cattlemen, October 1, 2001	
✓	25	Fields, A SOLUTION TO THE REBREEDING DILEMMA - EARLY WEANING, The Florida Cattleman, March 2002, pgs. 8-9	
✓	26	Nutrient Requirements of Beef Cattle Update 2000, Chapter 1, pgs. 3-15	
✓	27	Nutrient Requirements of Beef Cattle Update 2000, Appendix Table 1, pgs. 192-203	
	28	Nutrient Requirements of Beef Cattle Update 2000, Diet Nutrient Densities for Growing and Finishing Cattle, Appendix Tables 15-19, pgs. 210-214	

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